

Council Study Meeting September 19, 2016 6:00 p.m. City Council Chambers

Agenda

- 1. Discussion of proposed inspection activities for the City's Sanitary Sewer System
 - a. Draft Time of Sale Ordinance
 - b. Smoke testing
- 2. Other items

1.

Meeting Date: 09/19/2016

Information

Subject

Discussion of proposed inspection activities for the City's Sanitary Sewer System

Information

WPC Rick Graves will discuss proposed inspection activities for the City's Sanitary Sewer System including the draft time of sale ordinance and smoke testing (packet).

Fiscal Impact

Attachments

Presentation

Time of Sale & Smoke Testing City Council Study Session September 19, 2016

Time of Sale Requirement

- Administrative Order required expensive repairs from 2009 to 2014
- Letter sent to DNR on April 1, 2014 requesting A.O. be lifted
- Letter commits the City will implement a "Time of Sale" ordinance
- Ordinance would require inspection of home prior to transfer of ownership

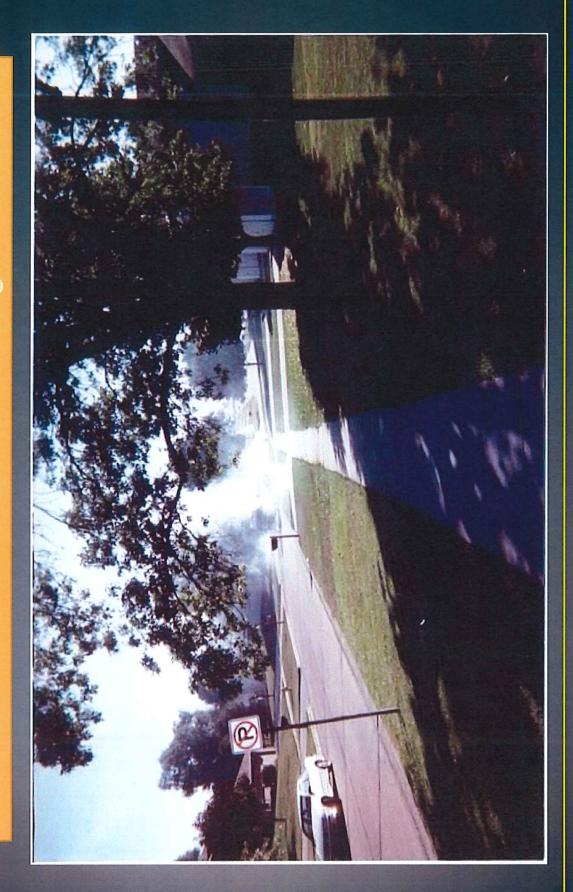
Time of Sale Requirement

- April 2016 work began on preparing a draft ordinance
- Initial input received from some local realtors was to make time of sale inspection a requirement
- As written, draft ordinance requires:
- Inspection by WPC prior to sale
- Inspection fee
- Certificate of Compliance
- · Corrections of any illegal connection
- Does not require repair work for service lines
- · Results of inspection shared with parties much like a home inspection report 1s

Time of Sale Requirement

- Would like input from City Council on presented draft
- Incorporate any input from City Council
- Share draft with local realtors to solicit input
- · Report back to City Council with input and final recommendation
- Schedule date for City Council consideration

SMOKE TESTING ANOTHER GREAT RESOUCE FOR I&I IDENTIFICATION

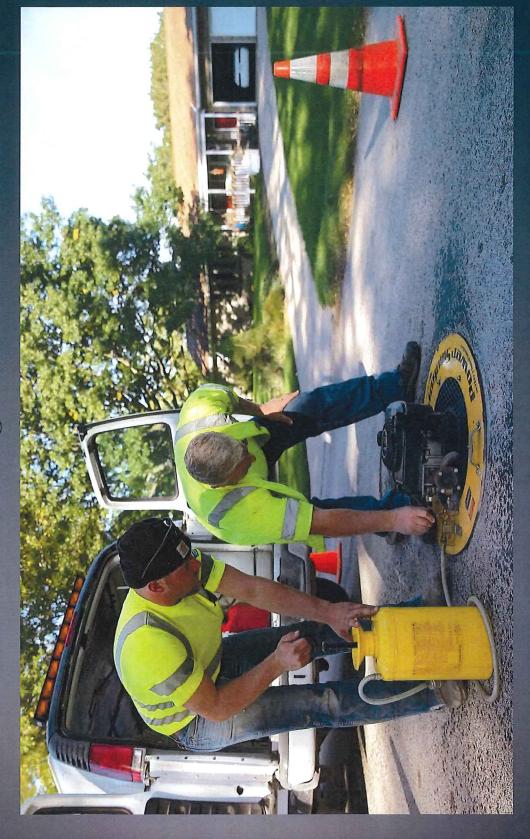


- Recognized best practice in detecting Inflow and Infiltration (I/I)
- Inflow = caused by illegal connections (sump pumps, downspouts and perimeter tile hooked to the sanitary sewer)
- Infiltration = caused by deteriorating pipes
- The smoke is non-toxic, creates no fire hazard, leaves no residue, dissipates quickly and is harmless.
- Allows us to better prioritize our projects (be more cost effective) to continue to control I/I into system
- Better control of 1/1 allows us to better control costs for customer by reducing the treatment costs at the wastewater facility

What to do with results

- Smoke testing allows us to collect data primary focus is on the City's collection system
- Allows us to better prioritize our projects (be more cost effective) to continue to control I/I into system
- Will also allow us to identify private sewer lines are leaking or deteriorating.
- This is courtesy information we would share with residents. No enforcement is expected.
- Enforcement would be taken in only cases of illegal connections, not deteriorating laterals.
- 97.01 of City Code prohibits intentional discharge of "clear" water into sanitary sewer.
- Enforcement would be done in a cooperative, customer service oriented way.
- Seek voluntary compliance

Central lowa Televising (CIT) Performing Smoke Test



Procedure

- Requires Crew large enough to cover area in time span, usually 4 to 6 people.
- Set up blower over manhole to force smoke through sewer main and up service laterals in a two block distance
- Watch for the smoke and take photos of the smoke
- Document findings on each house and location where the smoke is coming from
- Verify that each house has been smoked by checking their vent pipe on the roof (see next slide)

Normal site





WATER POLLUTION CONTROL

Dear City of Indianola Resident:

In its ongoing effort to improve public infrastructure. City of Indianola WPC is conducting a program to identify locations where storm water is entering the sanitary sewer system. The study, being performed by the city's contractor, Central lowa Televising (CIT), Story City IA, includes smoke testing of the sanitary sewers highlighted on the map on the reverse side of this letter.

Smoke testing will begin the week of ???????? and is anticipated to be completed before ?????????. Door hanger cards will be placed a couple days before smoke testing starts in your area. Smoke testing locates openings in the sewer system that allows surface rainwater runoff to enter the sanitary sewers. Air combined with non-toxic smoke is forced into the sewer lines to disclose the location of connections and leaks. Smoke may appear where there are defects in the main sewer line or laterals (connection between the main line and a building) or where there are other connections to the sewer system such as roof drains, and footing drains.

Smoke should not enter buildings unless there is defective plumbing or dried-up drain traps. Smoke should exit your vent pipe that is on your roof.

To help prevent smoke from entering your home, please pour water into infrequently used sinks, showers and floor drains. You should always feel free to call 911 in an emergency, However, if you believe smoke is entering your home from smoke testing, please contact a member of the CIT field crew if they are still on your street. If the CIT field crew is no longer in the area, please contact the city's Water Pollution Control Department at 515-961-9416.

The smoke is non-toxic, creates no fire hazard, leaves no residue, dissipates quickly, and is harmless. However, if someone in your home has respiratory problems, you may wish to take extra precautions on your own, such as leaving your home until the smoke testing is

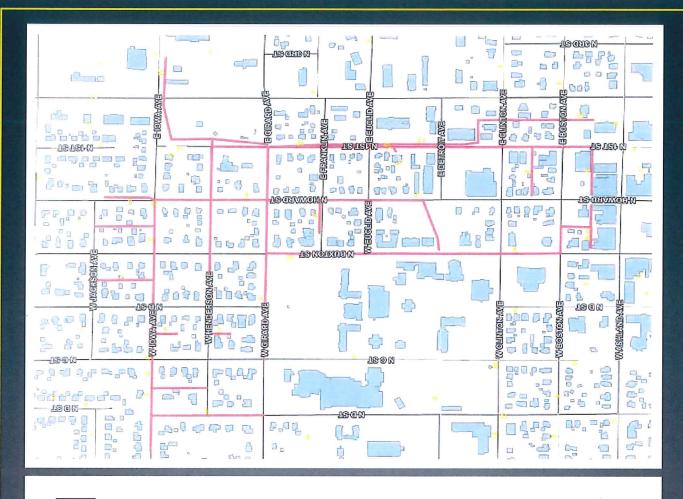
An Open House to answer any questions will be held in the Council Chambers at City Hall on 7777777 from 5:30 pm to 6:30 pm.

If you have questions please call Shane Jacobson from CIT at (515) 290-8295 or Rick Graves from City of Indianola WPC at (515) 961-9416.

Sincerely

City of Indianola Water Poliution Control

11070 HOOVER STREET • PO BOX 299 • INDIANOLA, IOWA 50125 • PHONE: [5]51 961-9416 • INDIANOLATOWA.COV



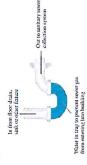
DOOR HANGER



Sewer Smoke Testing

In the next few days, the City will test the condition of the santary sewers in your area by filling them with a non-toxic, odorless smoke. The tost will holp us find broaks and defects in the sewer system.

Before the test: Pour 3 glasses of water down every sink, drain and clean-out drain in your home and basement to make sure your traps are full.



During the test: You may notice smoke coming from vert stacks on houses or holes in the ground. This is normal and not a cause for concern. If your plumbing is intact, smoke from the test should not enter your home.

After the test. Il smoke does enter your home, it is an indication that defects in your plumbing could also allow dangerous sewer gases to enter your home. Open windows and doors to ventilate your home and leave the area until the smoke clears. While the smoke is not harmful, it can be irritating. You may want to contact a plumber to further investigate and correct the problem.





More information:

The smoke is non-toxic, non-staining, has no odor and does not create a fire hazard. It is white to gray in color and is not harmful to pets.

Why are we testing the sewer?

All oties are required to address problems with excess water entering the sanitary sewer system; which overwhelms the capacity of the system leading to basement back-ups and discharges. The goal is to identify areas where stormwater and goundwater are orntoring the sanitary sewer system, so the city can plan repairs to improve the system.

If you need special assistance or know of any individual in your neighborhood who may need assistance during the test, please contact Cliy Hall.

Questions?

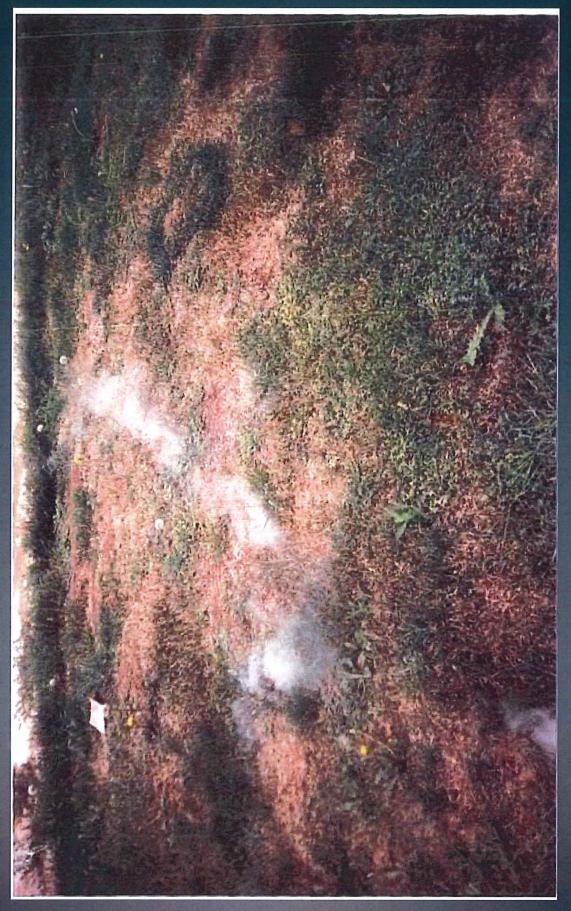
If you have any questions about this study, contact Shane Jacobson at (515) 290-8295.



Problem areas that contribute to I/I

Area around the foundation





Private Service Line Cleanouts

Storm Sewers

Potential areas inside the home where smoke may be found

- Wax rings on stools
- Dry floor drains
- Around the joints of pipe
- Holes in pipe
- Foundation tile tied to the sanitary sewer
- Washing machines not trapped
- Cracks in floor or walls

Expense

This is a budgeted activity.

Annual Sewer Mains Inspection/ Repair	FY 17	FY 18	FY 19	FY 20	FY 21
Cleaning Televising	20,000	25,000	25,000	25,000	25,000
Smoke Testing	6,000	11,250	11,250	11,250	11,250
Manhole Repair	34,000	42,500	42,500	42,500	42,500
Lining/Repair Sewer Mains	89,120	111,400	111,400	111,400	111,400
Flow Monitoring	7,900	9,875	9,875	9,875	9,875
Contingency	39,980	49,975	49,975	49,975	49,975

Smoke testing is included as a service in the Central lowa Televising, CIT, contract that was approved earlier this year.

Meeting Date: 09/19/2016	
	Information
Subject	
Draft Time of Sale Ordinance	
Information	
	Fiscal Impact

Attachments

1. a.

Letter Ordinance

City Council Study Meeting



April 1, 2014

Mr. Tom Atkinson IDNR Field Office #5 7900 Hickman Rd., Suite 200 Windsor Heights, IA 50324-4432

RE: INDIANOLA ADMINISTRATIVE CONSENT ORDER...

Dear Tom:

HR Green, Inc. is writing this letter on behalf of the City of Indianola. In 2009 an Administrative Consent Order was established for the City of Indianola to make wastewater system improvements in their collection system to eliminate sanitary sewer overflows (SSOs) and bypasses from their collection system. In 2012 the Administrative Consent Order was amended to reduce the pace of private I/I investigations (paragraph 2) and revise the schedule of Phase IV improvements (paragraphs 10 and 11). In the amended consent order many of the original requirements of the order were deemed by the DNR to have been satisfied. This letter is to request the remaining items in the Administrative Consent Order to be satisfied.

The two remaining items addressed in the Second Amended Order are completed and/or not effective in reducing SSOs and sewer backups. Each of these items is addressed:

Private Sewer Connections – The original and amended Consent Order included a specific number of private service lines to be investigated and repaired to remove clear water connections. The City has aggressively attacked these private sewer connections to remove clear water since 2009. They have realized a significant reduction in private I/I as a result of these private repairs. The City now believes that more "bang for their buck" can be gained by improvements to the Wastewater Treatment Plant and wishes to transition the private I/I work to inspection and repairs when a property is sold. The City is willing to adopt an ordinance to require this inspection of private services at the time of sale of a home in lieu of completing the remaining private inspections originally required by the Consent Order. In addition, HR Green has recently completed a GIS survey for each manhole in the collection system and a Collection System Model. The model will help the City assess future collection system issues so when there is a problem, the follow on repairs can be limited to only the area where they are needed.

Completion of Phase IV – South Plant Service Area – The sanitary sewer rehabilitation project Phase IV has recently been completed and accepted by the City. Phase IV sanitary sewer rehabilitation included; lining of 25,000 feet of sewer, replacing 3,000 feet of sewer, lining or grouting 178 manholes, miscellaneous repairs to 25 manholes, replacement of 35 manholes, grouting 142 sewer service connections and lining of 60 service connections in the right-of-way. With the Phase IV project complete the City has replaced or lined approximately 25% of their collection system sewers and replaced or repaired approximately 35% of their sewer manholes since 2008.

April 1, 2014 Mr. Tom Atkinson Page 2

Based on the City's request to turn their focus toward improvements of their Wastewater Treatment Plant, the progress made in the private I/I removal, and the completion of Phase IV sewer rehabilitation project, the City requests that the DNR deem all the requirements of the Administrative Consent Order satisfied. If you need additional information or have questions please contact me at (515) 657-5261 or Dan Miers directly at (515) 961-9416.

Sincerely,

HR GREEN, INC

James R. Rasmussen, P.E.

Water Business Line President

Cc: Eric Hanson – Indianola City Manager

Dan Miers – Indianola WW Superintendant

ORDINANCE AMENDING THE INDIANOLA MUNICIPAL CODE BY ADDING CHAPTER 94, AUTHORIZING TIME OF SALE INSPECTIONS WITHIN THE CITY SANITARY SEWER SYSTEM

WHEREAS, the City of Indianola is required by the Iowa Department of Natural Resources (IDNR) to reduce peak sanitary sewer flows caused by inflow and infiltration or the flow of clear water into the local wastewater collection system; and

WHEREAS, new Municipal Code Chapter 94 will address the requirements of the IDNR by implementing a Time of Sale Inspection on all single family dwelling properties within the City of Indianola sanitary sewer system to ensure that the discharge of unpolluted waters into the sanitary sewer system is restricted; and

WHEREAS, the City Council of the City of Indianola, Iowa now deems it proper to amend the Indianola Municipal Code Chapter 94 to the Municipal Code of the City of Indianola, Iowa entitled Sanitary Sewer Services — Time of Sale Inspections.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF INDIANOLA, IOWA:

Section 1: That the Municipal Code of the City of Indianola, Iowa, be and it is hereby amended by adding a new Chapter 94 Sanitary Sewer Services – Time of Sale Inspections as follows:

94.01 Purpose

The Time of Sale Inspection is intended to help reduce peak sanitary sewer flows caused by inflow and infiltration or the flow of clear water into the sanitary sewer system. Iowa Department of Natural Resources (IDNR), which provides oversight of wastewater collection and treatment for the entire state, requires the City of Indianola to reduce peak flows to the local wastewater collection system. The Time of Sale Inspection allows the City to ensure that private properties have no illegal connections to the sanitary sewer system pursuant to Municipal Code Chapter 97.

94.02 Required Inspection

No person or entity shall transfer title of a single family dwelling property to another, nor accept from any other person or entity, the transfer of title to any structure or parcel of land upon which a structure is located within the City of Indianola sanitary sewer system unless and until the authorized Water Pollution Control Superintendent, or representative of the Superintendent, shall have inspected the sump pump system, lateral service line, interior floor drains, footing drains, yard drains, roof drains and downspouts, catch basins

and parking lot drains on said structure or parcel of land and certified to the City of Indianola that same is found to be in compliance with the provisions of this law, specifically Section 97.01, restricting the discharge of unpolluted waters into the sanitary sewer system in the City of Indianola sanitary sewer district; and the Water Pollution Control Superintendent or his/her designee has issued a Certificate of Compliance stating compliance. This section shall not apply to transfers of property by gift, intestacy or testamentary disposition; transfers pursuant to the federal bankruptcy act; transfers under Warren County Property Tax Foreclosures; and mortgage foreclosures or lateral lines that have been identified as multiple service.

94.03 Property Owner Responsibility

The property owner shall request a time of sale inspection by filing an application with the City of Indianola Water Pollution Control Department within fifteen (15) working days of listing said property. The fee required for this inspection shall be set by resolution of the City Council. Upon successful inspection, the Office of Water Pollution Control will issue a Certificate of Compliance, which will expire after a period of one (1) year. The Certificate of Compliance shall be attached to the Groundwater Hazard Statement and presented to the Recorder along with all other required transfer documents.

If the inspection fails, the Water Pollution Control Superintendent will issue a Notice of Violation to the property owner(s) describing the prohibited discharges and recommendations to cure such discharges. When required, all permits necessary to cure violations must be obtained from the Community Development Department. The fee required for such permits shall be set by resolution by the City Council.

94.04 Suspension of Certificate of Compliance

The Water Pollution Control Superintendent, subject to the following, may temporarily suspend the requirement of a Certificate of Compliance as a prerequisite to transfer of title, as specified in the preceding section, provided that it is no later than ten (10) working days prior to the expected closing for said transfer:

- 1. The seller makes a written request to the Water Pollution Control Superintendent and such request includes a written, itemized quote from a plumber licensed with the State of Iowa that provides for correction of all identified discharges and addresses all recommendations specified in the Notice of Violation; and
- 2. The seller and purchaser shall have filed with the Water Pollution Control Superintendent a written guaranty to correct any identified deficiencies on said structure or parcel of land within 90 days after closing of sale or a period of time specified by the Water Pollution Control Superintendent; and
- 3. The purchaser or seller shall have provided a sum equal to 150% of the estimated costs contained in the itemized quote provided in item (1) above. Such sum shall be payable by certified check or bank draft at closing and held in escrow. Such sum will be returned to the seller or purchaser if the corrections are completed within the time specified in the guaranty, but said sum shall be forfeited to the City of Indianola if

needed corrections are not completed within the time frame specified in the written guaranty.

In the event that the needed corrections are not completed within the time specified in the written guaranty, the temporary waiver issued by the Water Pollution Control Superintendent shall immediately expire and the purchaser shall be subject to the penalties described in Section 99.05 (C).

- **94.05 SPECIAL PENALTIES.** The following special penalty provisions shall apply to violations of this chapter:
 - 1. Notice of Violation. Any person found to be violating any provision of this chapter shall be served by the City with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

 2. Continuing Violations. Any person who shall continue any violation beyond the time limit provided for in subsection 1 hereof shall be in violation of this Code of Ordinances. Each day in which any such violation shall continue shall be deemed a separate offense.

 3. Liability Imposed. Any person violating any of the provisions of this chapter shall become liable to the City for any expense, loss, or damage occasioned the City by reason of such violation. Further, a violation of the provisions of this chapter shall be a violation considered a municipal infraction punishable in accordance with Chapter 4 of the Municipal Code.

Section 2: All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section 3: This ordinance shall	I be in full force and effect of	on
PASSED AND APPROVED this	day of	, 2016.
ATTEST:	Kelly B. Shaw, Mayor	
Diana Bowlin, City Clerk		
First reading:		
Second reading:		
Third reading:		
Publication Date:		

City Council	Study	Meeting
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Meeting Date: 09/19/2016

	Information	
Subject		
Subject Smoke testing		
Information		
	Fiscal Impact	
	Attachments	
No file(s) attached.		

1. b.

Meeting Date:	e: 09/19/2016	
	Information	
Subject Other items		
Other items		
Information		
	Fiscal Impact	

Attachments

2.

City Council Study Meeting

No file(s) attached.